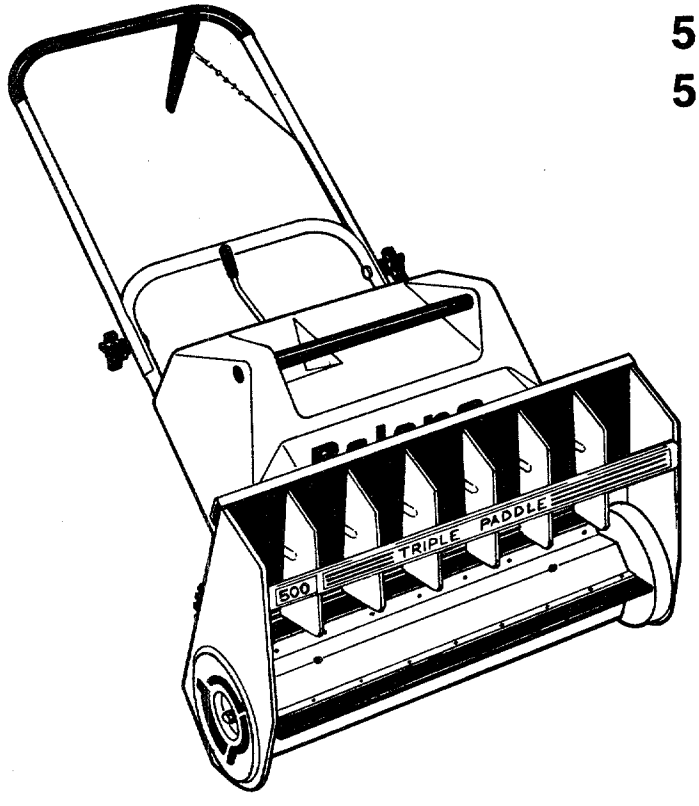
Bolens®

Snow Thrower

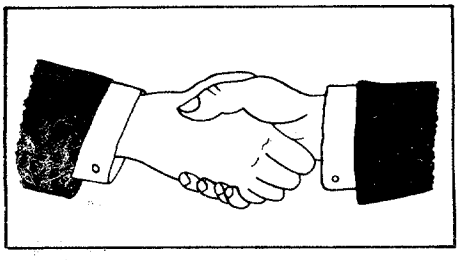
Models 225
225E
300
300E
350
350E
500
500E
520



Safety and Operation Instructions

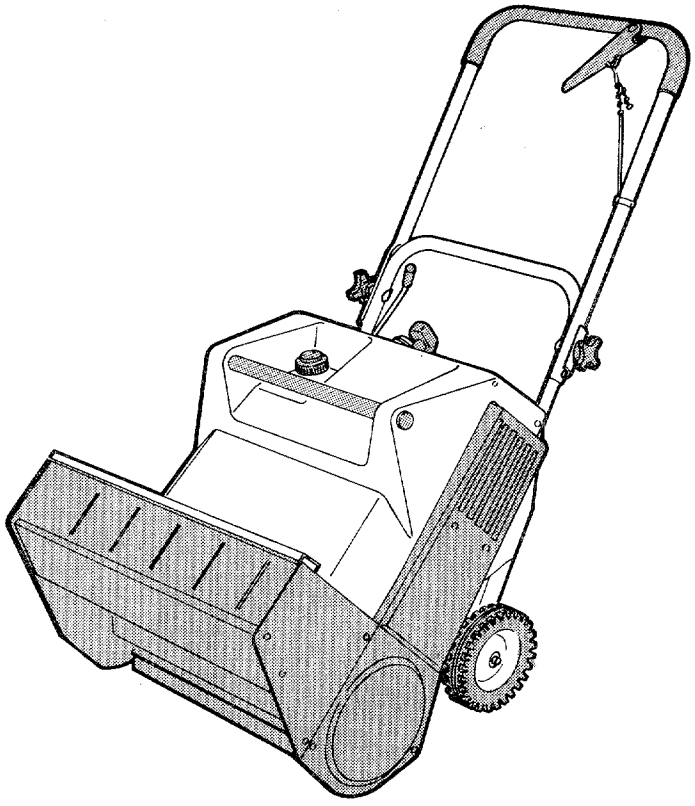
FORM 553512-5 (8/85)
SUPERSEDES 553512-4

INTRODUCTION



Thank you for purchasing this piece of Bolens equipment. We feel you now own one of the finest pieces of equipment money can buy.

This is a safety, operation and general maintenance manual which does not attempt to cover major repairs. Bolens equipment has been carefully designed, engineered and manufactured to give good performance if properly operated and maintained. Review this manual to familiarize yourself with the unit, its features and its operation.



This equipment is manufactured by Bolens Corporation, 215 South Park Street, Port Washington, Wisconsin 53074. (Phone: 414-284-5521). If you should have any questions or encounter any problems which you feel only the factory can solve, write to the above address or call our Service Department.

Your Warranty Statement is also included (on back cover) with this manual. Please read it carefully. Also, be sure to complete and return the included postpaid owner registration card. The purpose of this card is to register each unit and owner at the factory for safety purposes.

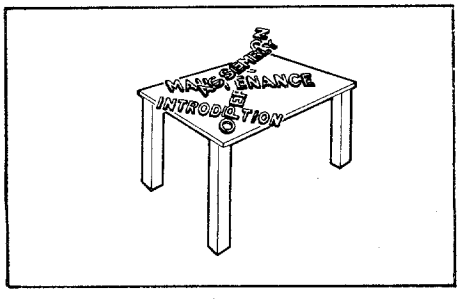
CONTACT YOUR DEALER FOR ANY REPLACEMENT PARTS OR SERVICE NEEDED. DO NOT RETURN PARTS DIRECTLY TO THE FACTORY. THE FACTORY REQUIRES PRIOR APPROVAL ON RETURNS, AND APPROVALS ARE ISSUED ONLY TO BOLENS DEALERS OR DISTRIBUTORS.

Bolens Corporation reserves the right to make changes in specifications shown herein, add improvements, or discontinue the manufactured product at any time without notice or obligation.

The illustrations shown throughout this manual may not look exactly the same as your snow thrower. Production line changes as well as differences in models may alter their appearance.

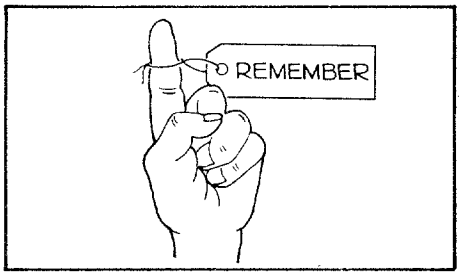
Know your snow thrower before you operate it. Carefully review this manual and become thoroughly familiar with the operating procedures and safety precautions.

TABLE OF CONTENTS



Safety Precautions 3
Identification Numbers. 4
Specifications 5
Assembly 5
Controls 6
Before Operation. 6
Operation 8
Care and Maintenance . . . . . .
Storage . . . . . .

GENERAL SAFETY PRECAUTIONS



This symbol is being used to attract attention to the safety precautions that should be obeyed by the operator to help avoid accidents.

CAUTION

PREVENTING ACCIDENTS IS YOUR RESPONSIBILITY. BE SURE YOU UNDERSTAND AND OBSERVE THESE SAFETY PRECAUTIONS. NEVER TAKE CHANCES. REMEMBER, ACCIDENTS CAN BE PREVENTED.

TRAINING

1. Read the operating and service instruction manual carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.

2. Never allow children to operate equipment. Never allow adults to operate equipment without proper instruction.

3. Keep the area of operation clear of all persons, especially small children and pets.

4. Exercise caution to avoid slipping or falling, especially when operating in reverse.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all door mats, sleds, boards, wires and other foreign objects.

2. Do not operate equipment without wearing adequate winter outer garments. Wear footwear which will improve footing on slippery surfaces.

3. Handle fuel with care, it is highly flammable.

   a. Use approved fuel container.

   b. Never add fuel to a running engine or hot engine.

   c. Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.

   d. Replace gasoline cap securely and wipe up spilled fuel.

4. Use a grounded three wire cord and plug-in for all units with electric starting motors.

5. Never attempt to make any adjustments while engine or motor is running (except where specifically recommended by manufacturer).

6. Let engine and machine adjust to outdoor temperatures before starting to clear snow.

OPERATION

1. Do not put hands or feet near rotating parts. Keep clear of discharge opening and collector at all times.

2. Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.

3. After striking a foreign object, stop the engine (motor), thoroughly inspect the snow thrower for any damage, and repair the damage before restarting and operating the snow thrower.

4. If the unit should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.

5. Stop engine (motor) whenever you leave the operating position, before unclogging the collector/impeller housing or discharge guide, and when making any repairs, adjustments or inspections.

6. Take all possible precautions when leaving the vehicle unattended. Stop the engine and remove the key.

7. When cleaning, repairing or inspecting make certain collector/impeller, and all moving parts have stopped. Disconnect cord on electric motors.

8. Do not run engine indoors, except when starting engine for transporting snow thrower in or out of building. Open outside doors, exhaust fumes are dangerous.

9. Exercise extreme caution when changing directions on slopes. Do not attempt to clear steep slopes.

10. Never operate snow thrower without guards, plates, or other safety protective devices in place.

11. Never operate snow thrower near glass enclosures, automobiles, window wells, drop-offs, etc., without proper adjustment of snow discharge angle. Keep children and pets away.

12. The exhaust muffler gives off heat. Avoid contact with any surface which may be hot.

GENERAL SAFETY PRECAUTIONS (continued)

13. Do not overload machine capacity by attempting to clear snow at too fast a rate.

14. Never operate machine at high transport speeds on slippery surfaces.

15. Never direct discharge at bystanders or allow anyone in front of unit.

16. Use only attachments and accessories approved by manufacturer of snow thrower.

17. Never operate the snow thrower without good visibility or light. Always be sure of your footing and keep a firm hold on the handles and walk, never run.

MAINTENANCE AND STORAGE

1. Check engine mounting bolts, etc. at frequent intervals for proper tightness to be sure equipment is in safe working condition.

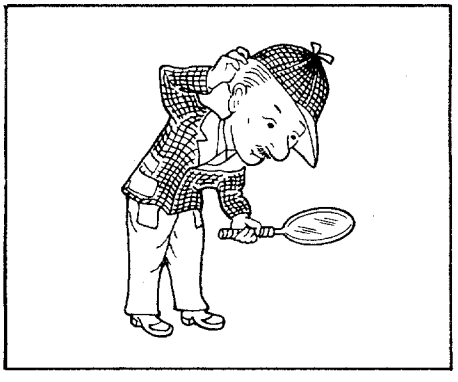
2. Check scraper bar mounting bolts at frequent intervals for proper tightness to insure smooth operation.

3. Never store machine with fuel in the fuel tank inside a building where open flame or spark are present. Allow engine to cool before storing in any enclosure.

4. Always refer to owner's guide instructions for important details if snow thrower is to be stored for an extended period.

5. Run machine a few minutes after throwing snow to prevent freeze up of collector/impeller.

IDENTIFICATION NUMBERS



For prompt service when repairs or adjustments are required, your AUTHORIZED BOLENS DEALER must have identification numbers listed. Fill in the spaces now for quick reference.

The AUTHORIZED BOLENS DEALER has a parts list for your snow thrower. He can identify and supply any parts you require. Contact the engine manufacturer's authorized dealer when engine parts are needed.

Snow Thrower:

Model Number _____

Serial Number _____

Engine:

Model Number _____

Serial Number _____

Spec. Number _____

Date of Purchase: _____

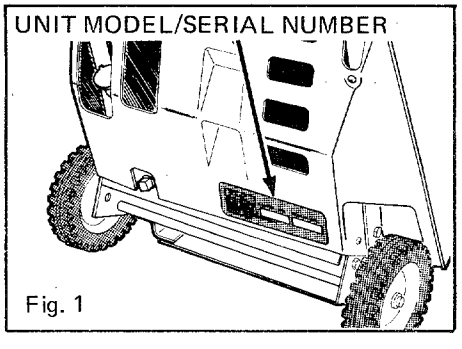


Fig. 1

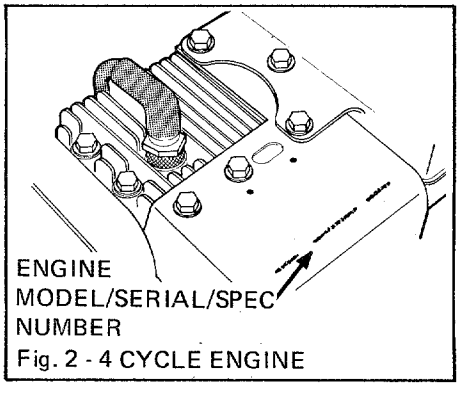


Fig. 2 - 4 CYCLE ENGINE

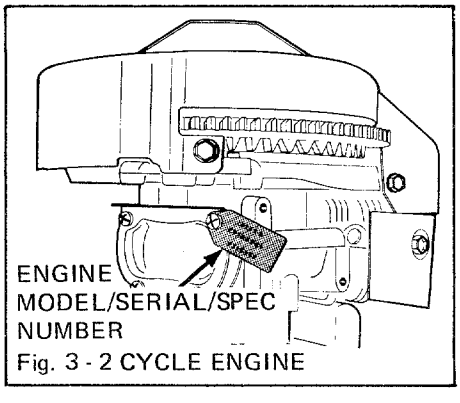


Fig. 3 - 2 CYCLE ENGINE

SPECIFICATIONS

Model	225 / 225E	300 / 300E	350 / 350E	500 / 500E	520
	Single-Stage	Single-Stage	Single-Stage	Single-Stage	Single-Stage
Engine	Tecumseh 2.25 HP/1.7 kW 2 cycle	Tecumseh 3.0 HP/2.2 kW 2 cycle	Tecumseh 3.5 HP/2.6 kW 4 cycle	Tecumseh 5 HP/3.7 kW 4 cycle	Tecumseh 5 HP/3.7 kW 4 cycle
Fuel Cap	2 qt./1.9 L	2 qt./1.9 L	2 qt./1.9 L	2 qt./1.9 L	2 qt./1.9 L
Cutting Width	20"/51 cm	20"/51 cm	20"/51 cm	24"/61 cm	20"/51 cm
Auger	Triple-Paddle Impeller Hi Capacity Poly V Belt				
Wheel Size	1.5 x 6" Rubber (3.8 x 15.2 cm)	1.5 x 6" Rubber (3.8 x 15.2 cm)	1.5 x 6" Rubber (3.8 x 15.2 cm)	1.5 x 7" Rubber (3.8 x 17.8 cm)	1.5 x 6" Rubber (3.8 x 15.2 cm)
Approx. Weight	42 lbs./19.0 Kg	42 lbs./19.0 Kg	50 lbs./22.7 Kg	52 lbs./23.6 Kg	50 lbs./22.7 Kg
Start	MANUAL / YES	MANUAL / YES	MANUAL / YES	MANUAL / YES	MANUAL
Auger Clutch	Kit Available	Kit Available	Yes	Yes	Yes
Snow Discharge	3 Way Directional				
Fold Down Handles	Yes	Yes	Yes	Yes	Yes

* MANUAL START UNITS MAY ACCEPT AN ELECTRIC START KIT, CONTACT YOUR AUTHORIZED ENGINE DEALER.

ASSEMBLY

Remove Snow Thrower from carton and assemble as described.

1. HANDLE INSTALLATION

The snow thrower was shipped with the handle in the folded down position. To position handle for operation:

a. Remove hand knobs (A), Figure 4.

b. Lift handle up and position in either of two operating positions: HIGH position (B) or LOW position (C). Pinched ends of upper handle (D) must fit snugly around lower handle (E).

c. Place handle plates (H) onto threaded studs.

d. Retighten hand knobs.

e. If snow thrower is equipped with an auger clutch control, (F) Figure 5, the following must be done for proper clutch engagement.

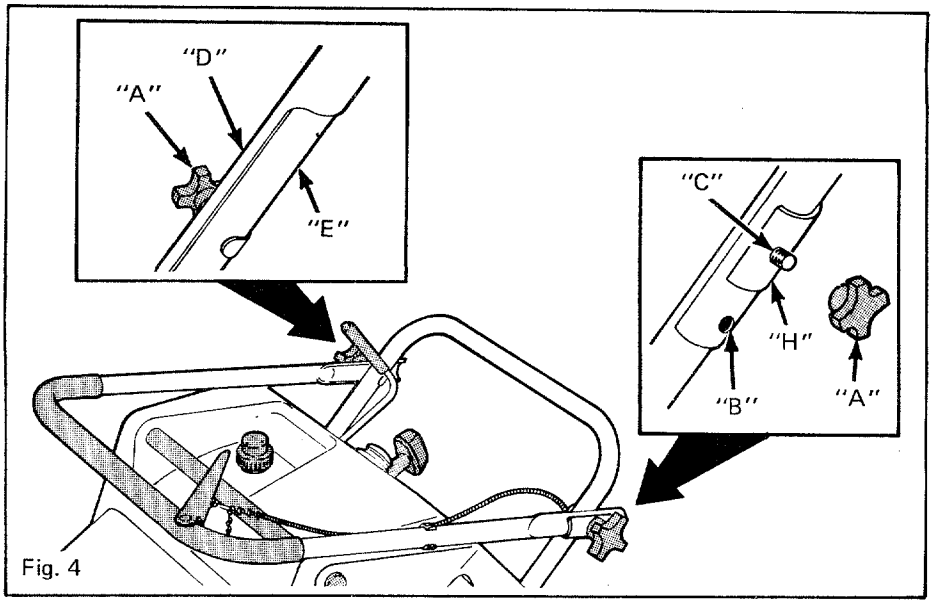


Fig. 4

With auger clutch handle down, pull cable up (to remove slack) until a solid resistance is felt. Select the chain link closest to open end of clutch lever hook (G) and assemble. Release cable.

This procedure should provide proper clutch engagement.

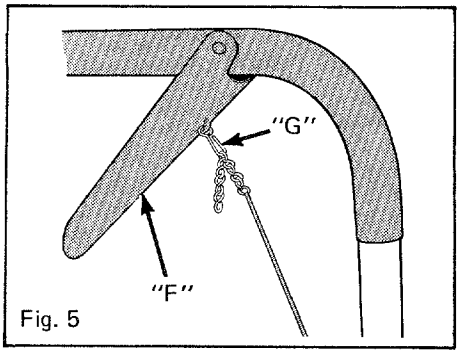
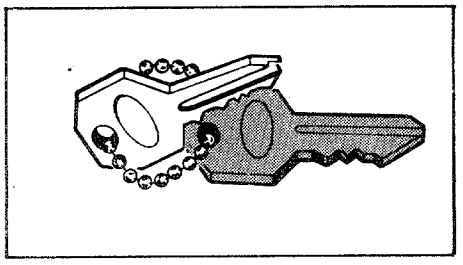


Fig. 5

CONTROLS



VANE CONTROL

The vane control (A), Figure 6, is used to direct snow discharge left, right or straight ahead.

IGNITION KEY

The ignition key (B), Figure 6, allows the starting and stopping of engine.

CHOKE CONTROL

The choke control (C), Figure 6, aids in cold engine starting.

RECOIL STARTER

This starter rope (D), Figure 6, allows the engine to start (by pulling) with the key ON.

PRIMER BUTTON

The primer button (E), Figure 6, permits the operator to hand prime (by pressing) the engine carburetor. NOTE: When priming (Models 225 & 225E only) be sure your thumb is covering vent hole.

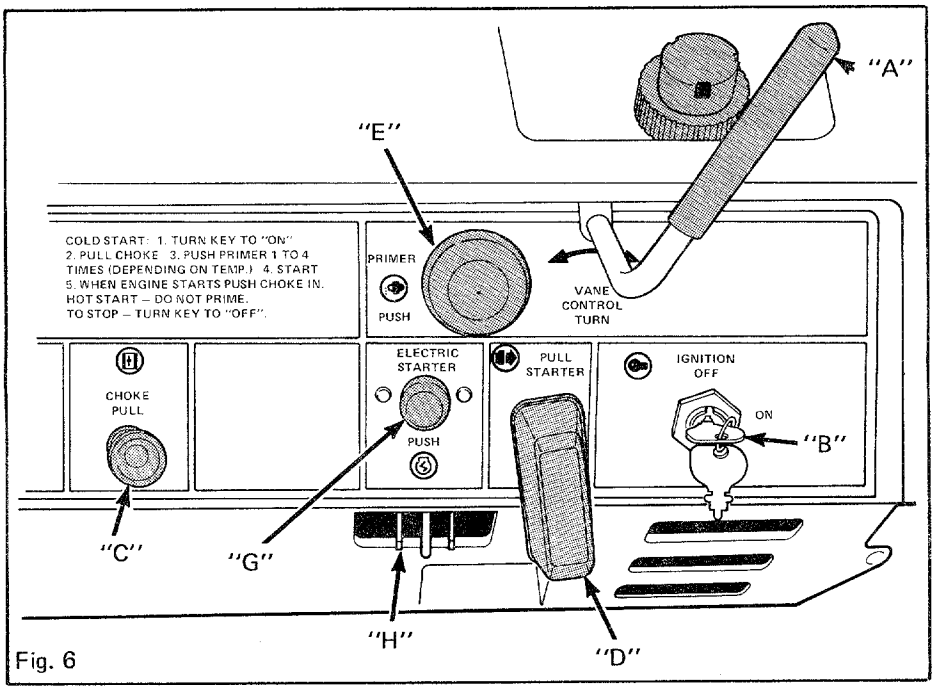


Fig. 6

ELECTRIC STARTER BUTTON
(Electric Start Models Only)

This starter button (G), Figure 6, is used to start the engine (by pressing) with the ignition key ON.

AUGER CLUTCH (Some Models)

This control (F), Figure 7, engages impeller when pulled up to handle bar and disengages impeller when released.

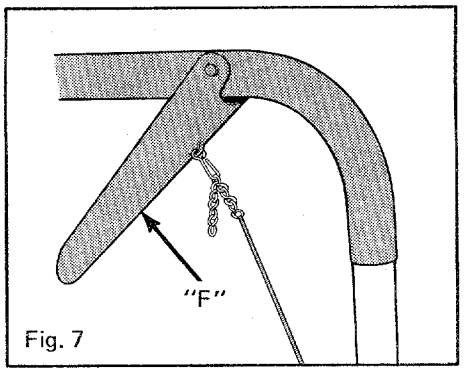
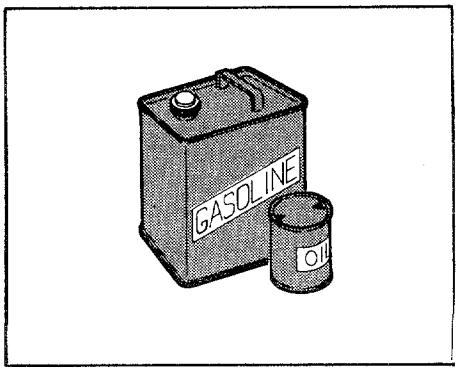


Fig. 7

BEFORE OPERATION



WARNING

MODELS 350, 305E, 500, 500E & 520

THIS SNOW THROWER WAS SHIPPED WITHOUT LUBRICATION IN THE CRANKCASE. FILL THE 4 CYCLE ENGINE, IF SO EQUIPPED, WITH OIL AS OUTLINED IN THIS MANUAL AS WELL AS THE ENGINE MANUAL.

MODELS 225,225E, 300 & 300E

THE 2 CYCLE ENGINE HAS NO OIL SUMP IN THE CRANKCASE, THEREFORE RELIES ON THE OIL IN THE FUEL MIXTURE FOR LUBRICATION.

BEFORE OPERATION (continued)

CAUTION

DO NOT REFUEL WHILE ENGINE IS RUNNING OR HOT. KEEP SMOKERS AND FLAMES AWAY WHEN REFUELING.

MODELS 225, 225E, 300 & 300E

(2 Cycle Engine)

A two cycle engine has no oil sump in the crankcase; therefore it relies on the oil in the fuel mixture for lubrication.

CAUTION

ALL 2 CYCLE ENGINES MUST HAVE OIL MIXED INTO THE FUEL.

Mix oil with fresh clean unleaded automotive gasoline. (Leaded "regular" grade gasoline is an acceptable substitute.) See FUEL MIX CHART. Use SAE 30 or 40 outboard or 2-cycle oil. DO NOT USE AUTOMOTIVE OILS. Disregard instructions on oil containers. DO NOT mix directly in engine fuel tank. Doing so could cause engine damage. Refer to engine owner's manual.

FOR THOROUGH MIXING OF OIL AND GASOLINE - Fill can to one quarter full, add oil per chart, shake can vigorously, fill remainder of can with gas and reshake contents. ONCE MIXED, OIL AND GASOLINE WILL NOT SEPARATE.

MODELS 350, 350E, 500 500E & 520

(4 Cycle Engines)

Fill tank with fresh, clean unleaded automotive gasoline. (Leaded "regular" grade gasoline is an acceptable substitute).

CAUTION

DO NOT MIX OIL WITH THE GASOLINE. NEVER USE PREMIUM OR WHITE GASOLINE. (4 CYCLE ENGINES). THE USE OF GASOHOL IS NOT RECOMMENDED.

2 CYCLE ENGINES					
FUEL MIX CHART Mixture 32:1 (3% mixture)					
U.S.		IMPERIAL		S.I. (METRIC)	
Gas	Oil To Be Added	Gas	Oil To Be Added	Petrol	Oil To Be Added
1 Gal.	4 oz.	1 Gal.	4.5 oz.	4 Liters	.125 L
2 Gal.	8 oz.	2 Gal.	9 oz.	8 Liters	.250 L
5 Gal.	20 oz.	5 Gal.	22 oz.	20 Liters	.625 L

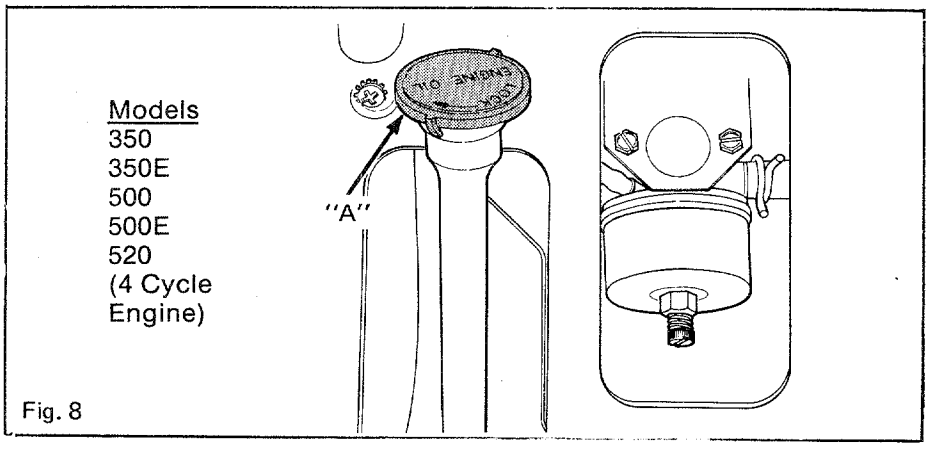


Fig. 8

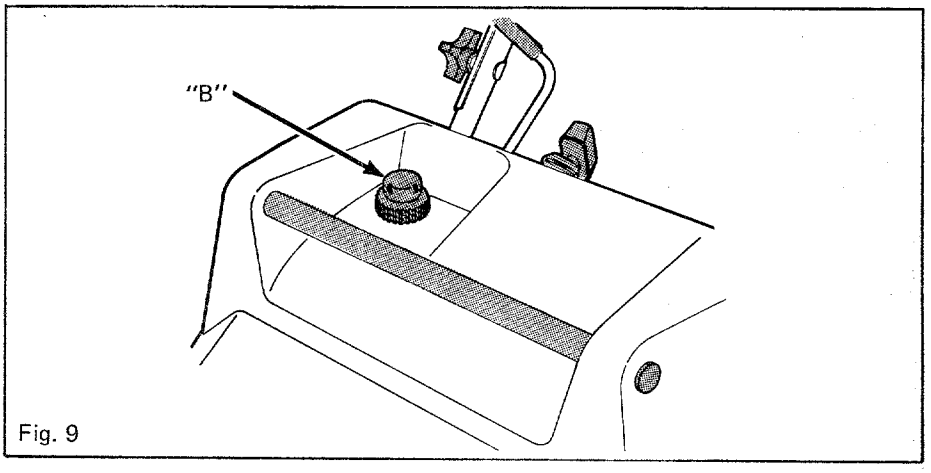


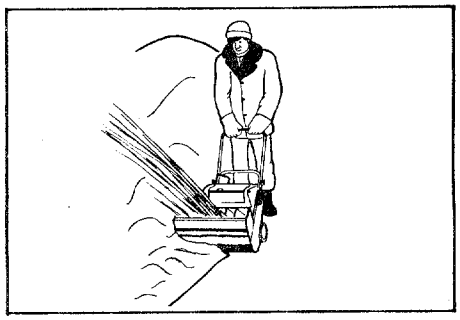
Fig. 9

MODELS 350, 350E, 500 500E & 520

FILL ENGINE CRANKCASE - 4 CYCLE ENGINES ONLY

Before operating, fill the crankcase to "FULL" mark on dipstick (A), Figure 8, using proper grade and amount of a quality engine oil.

OPERATION



NOTE

When first operating snow thrower give yourself ample time to acquaint yourself with the machine. Practice using ALL controls.

STARTING THE ENGINE (RECOIL START)

1. Turn ignition switch to "ON" position.

2. Pull choke.

3. Push primer button 1 to 4 times (depending on temperature). In temperatures above +15°F (-10°C) use one or two primes. In temperatures below +15°F (-10°C) use three or four primes. To prime engine, fully depress primer bulb with your thumb (if primer bulb has a vent hole, be sure thumb covers hole when priming). Release and allow bulb to return to original position. An engine should be primed if it is new, cold, stored, unused for an extended period of time or has been run dry of fuel.

4. Start engine. Hot or cold start — pull starter rope (see "STARTING INSTRUCTIONS" in engine manual).

5. When engine starts, push choke control in (if choking was necessary).

6. Pull up auger clutch control (if so equipped) to engage impeller. If adjustment is necessary refer to CARE AND MAINTENANCE section.

STARTING THE ENGINE (ELECTRIC START)

1. Plug cord into starter switch connector (H), Figure 6, and a convenient 120 volt outlet.

2. Follow steps 1, 2 and 3 from recoil start engine starting instructions.

3. Press starter button (see "STARTING INSTRUCTIONS" — Electric Start section in engine manual). Release as soon as engine starts.

CAUTION

DO NOT CRANK WITH ELECTRIC STARTER FOR MORE THAN 60 SECONDS. IF CRANKED FOR 60 SECONDS STARTER SHOULD NOT BE OPERATED AGAIN FOR 20 MINUTES TO ALLOW IT TO COOL.

4. After engine starts, push choke control in (if choking was necessary) and remove extension cord (from receptacle first).

5. Pull up auger clutch control (if so equipped) to engage impeller. If adjustment is necessary refer to CARE AND MAINTENANCE section.

STOPPING THE ENGINE

1. Turn ignition key to "OFF" position. Remove key.

2. Be sure all moving parts have stopped before leaving the operator's position.

CAUTION

STOP THE ENGINE BEFORE:

- **Adding fuel.**
- **Leaving snow thrower unattended, if only for a minute.**
- **Clearing discharge opening.**
- **Making any repairs or adjustments to unit.**

OPERATING TIPS

1. Before the first snowfall thoroughly inspect area where snow removal will take place. Remove all door mats, sleds, boards, wires, etc. that might be picked up and thrown by the impeller paddles.

2. Spray the inside of impeller paddle housing and directional vanes with Bolens silicone spray to help prevent snow build up. A coat of paste wax is also suitable.

3. All covers and guards must be in place and all nuts, screws and other fasteners tight.

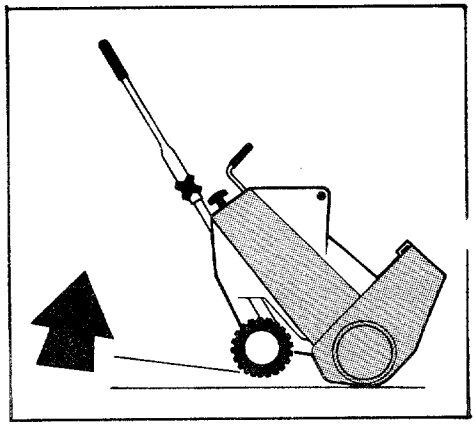
4. Allow engine to warm up approximately five (5) minutes before using.

5. Removing snowfall as soon as possible produces the best results.

6. To obtain the greatest performance from snow thrower, place vanes in a vertical position, discharge snow downwind and overlap each pass slightly.

7. The type of snow you are throwing will dictate to you how to use this machine. In light, fluffy snow the unit will propel itself if tilted forward slightly (lifting up on handle - as shown below) allowing the impeller paddles to contact the ground. In heavy wet snow the unit will propel itself forward without tilting. NOTE: The depth and weight of snow to be cleared will control forward speed of snow thrower.

8. In heavy, wet snow overlapping is essential to prevent overloading. Permit machine to work at a slow pace. If engine slows down due to overloading, pull unit back out of snow and/or release auger clutch control (if so equipped) until engine regains full power. Then allow machine to propel itself back into snow.



OPERATION (continued)

9. To clear snow from steps or to cut down drifts, hold snow thrower by the upper and lower handles and use a side-to-side (swinging) motion.

10. Before storing unit, let engine run a few minutes to keep ice from forming on moving parts. Clear control panel of snow and/or water to eliminate possible freeze up of controls.

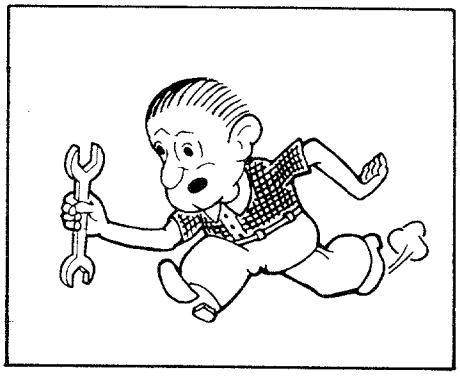
11. When storing unit, move vanes to vertical position to prevent possible distortion of vanes.

TROUBLESHOOTING

Before you take your snow thrower in for repairs, make sure you have followed the instructions in this manual. Check to see if the malfunction is something you can correct yourself. The above table may help you locate your problem.

PROBLEM	CAUSE
1. Engine will turn over but will not start	1. Ignition switch in "OFF" position. 2. Faulty or fouled spark plug. 3. Spark plug wire disconnected. 4. Empty fuel tank. 5. Incorrect choke setting.
2. Starts only after repeated tries	1. Faulty or fouled spark plug. 2. Incorrect choke setting.
3. Idles rough	1. Faulty or fouled spark plug. 2. Incorrect choke setting.
4. Engine overheats	1. Dirty air screen (4 cycle engines). 2. Low oil level (4 cycle engines). 3. Spark plug loose. 4. Dirty cooling fins. 5. Improper fuel mix (2 cycle engines).
5. Impeller does not turn	1. Torn or worn belt. 2. Auger Clutch not engaged.
6. Electric start unit will not crank the engine	1. Extension cord not plugged in. 2. Fuse or circuit breaker for outlet blown. 3. Faulty extension cord or plug.
7. Snow Thrower will not throw snow	1. Auger Clutch not engaged. 2. Worn impeller paddles. 3. Worn or torn drive belt.
8. Engine will not stop with key off.	1. Faulty or disconnected ignition switch. 2. Lead wire broken.

CARE AND MAINTENANCE



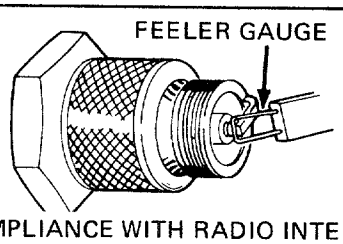
Check and tighten (if necessary) all nuts and bolts before using this machine and periodically thereafter (approx. every two (2) hours of operation). Vibration and/or rough handling may cause hardware to loosen. Tighten as required.

Refer to Engine Manual for maintenance procedures and requirements not covered in this manual.

SPARK PLUG

Clean and regap spark plug as necessary, Figure 10. 2 CYCLE ENGINE: .035" (0.9mm) - 4 CYCLE ENGINE: .030" (0.76mm). Refer to Engine Manual for cleaning procedure and replacement. When removing plug for maintenance be sure to clean area around spark plug to prevent dirt from entering engine. The spark plug is located under the upper cover.

A dirty, oily or carboned spark plug makes starting difficult and causes inefficient operation.



COMPLIANCE WITH RADIO INTERFERENCE REGULATIONS CERTIFIED. REPLACE SPARK PLUG WITH RESISTOR SPARK PLUG ONLY.

Fig. 10

ENGINE CRANKCASE

MODELS 225, 225E, 300 & 300E

2 CYCLE ENGINE - Proper engine lubrication is provided by adding the correct pre-mixed fuel to gasoline tank. See page 7.

MODELS 350, 350E, 500, 500E & 520

4 CYCLE ENGINE - Change oil after first 2 hours of operation and every 25 hours thereafter. Check oil level every 5 operating hours. Position snow thrower in its normal

CARE AND MAINTENANCE

operating position (wheels and scraper blade on the ground). Clean dirt and/or snow from around opening (A), Figure 11. Keep oil level to "FULL" mark on dipstick. Refer to Engine Manual for proper procedure to drain and refill engine crankcase. The drain plug (Q), Figure 11 is located on backside of unit in the bottom left-hand corner. Refer to Engine Manual and/or BEFORE OPERATION instructions for proper type oil and quantity.

CARBURETOR ADJUSTMENTS

DO NOT MAKE UNNECESSARY ADJUSTMENTS. FACTORY SETTINGS ARE SATISFACTORY FOR MOST APPLICATIONS AND CONDITIONS. HOWEVER IF ADJUSTMENTS ARE NEEDED, PROCEED AS FOLLOWS.

4 CYCLE ENGINE - The engine has been pre-set to run at 3600 RPM. Turn high speed adjustment needle (B), Figure 11, to regulate flow of gasoline to the engine. For complete adjustment procedure, refer to Engine Manual.

IMPORTANT

When closing adjusting needles, close finger tight only. Forcing may cause damage.

2 CYCLE ENGINE - The engine has been pre-set to run at 4300 RPM. Through opening (C), Figure 12, in hand side of machine, turn the mixture adjusting screw (D) (using a screwdriver) to regulate flow of fuel to the engine.

IMPORTANT

Do not force screw tight. Damage to carburetor or screw could occur. Refer to Engine Manual for complete adjustment procedure.

IMPELLER CLUTCH ADJUSTMENT

(for models so equipped)

Adjust cable (E), Figure 13 up or down by moving chain (F) one-half line (one loop) at a time. If impeller doesn't rotate when engaged, unhook chain, pull up on cable and rehook chain in next lower loop. If impeller rotates without engaging, unhook chain and rehook chain in next highest loop. Repeat procedure until proper adjustment is achieved.

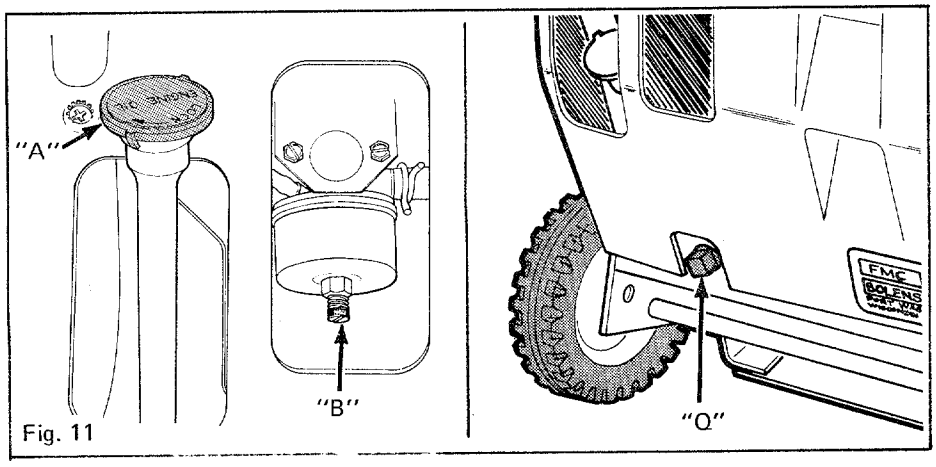


Fig. 11

PADDLE REPLACEMENT

If paddles become worn and fail to propel the snow thrower, replacement may be necessary. Replace all 3 paddles, one at a time. STOP ENGINE.

1. Remove screws (G), Figure 14, that secure paddle (H) to impeller frame (I).
2. Remove old paddle.
3. Install new paddle and secure it to impeller using the same screws and hex nuts used to secure old paddle.
4. Repeat procedure for other paddles.

BELT ADJUSTMENT - MODELS 225, 225E, 300 & 300E

If the idler pulley does not apply enough tension to belt to drive impeller, adjust belt as follows:

1. Remove drive cover. Remove the (8) screws (A & B) shown in Figure 16. Two plugs, in cover, must be removed to reach screws (A).
2. Remove anchor screw (Q), Figure 15, and reinstall screw in low position shown in Figure 15.

NOTE

Spring must never be stretched (measured from end to end) more that 3" (76 mm). If necessary, reposition anchor screw to position "X", Figure 15.

3. Reinstall drive cover.

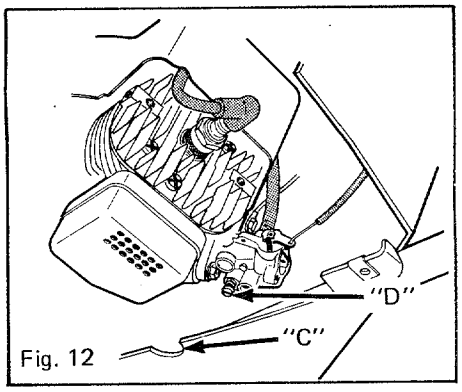


Fig. 12

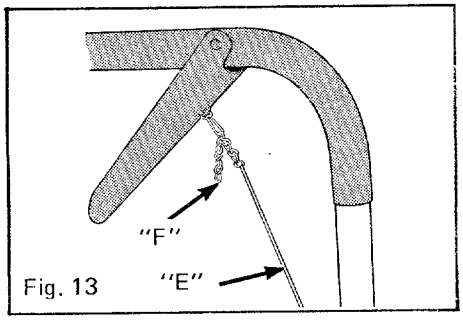


Fig. 13

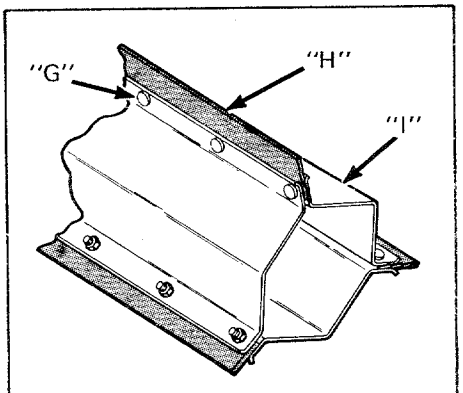


Fig. 14

CARE AND MAINTENANCE (continued)

BELT REPLACEMENT

If belt becomes badly worn or breaks, replace belt as follows: STOP ENGINE.

1. Remove drive cover. Remove the (8) screws (A & B) shown in Figure 16. Two plugs, in cover, must be removed to reach screws (A).

2. Remove anchor screw (Q), Figure 15, (Models 225, 225E, 300 and 300E).

3. Loosen belt fingers (K) and belt guide (L), (Models 350, 350E, 500 and 500E).

4. Remove old belt (J).

5. Install new belt.

6. With spring hooked around anchor screw shaft (Models 225, 225E, 300 & 300E) reinstall anchor screw in position "X", Figure 15.

Check belt tension. The idler pulley must apply enough tension to drive impeller. If it doesn't, refer to "BELT ADJUSTMENT" (Models 225, 225E, 300 & 300E).

7. Repostion and tighten belt fingers and guide (Models 350, 350E, 500 & 500E).

8. Reinstall drive cover.

MAINTENANCE SCHEDULE

BEFORE EACH USE:

.1 Check crankcase oil level - 4 cycle engines only.

2. Check for loose screws and nuts - especially engine hardware. Retighten if needed.

AFTER EACH USE:

1. Clean machine of all snow and slush. Brush out housing to remove sand and gravel.

DURING EACH SEASON: as needed, lubricate in the areas indicated in Figures 15 and 16 using a lightweight motor oil.

1. Idler Arm (M) (under drive cover). Figure 15 or 17.

2. Vane Control Mechanism (N) (under upper cover).

3. Impeller Bearings (O) (on both ends of impeller).

4. Wheels (P).

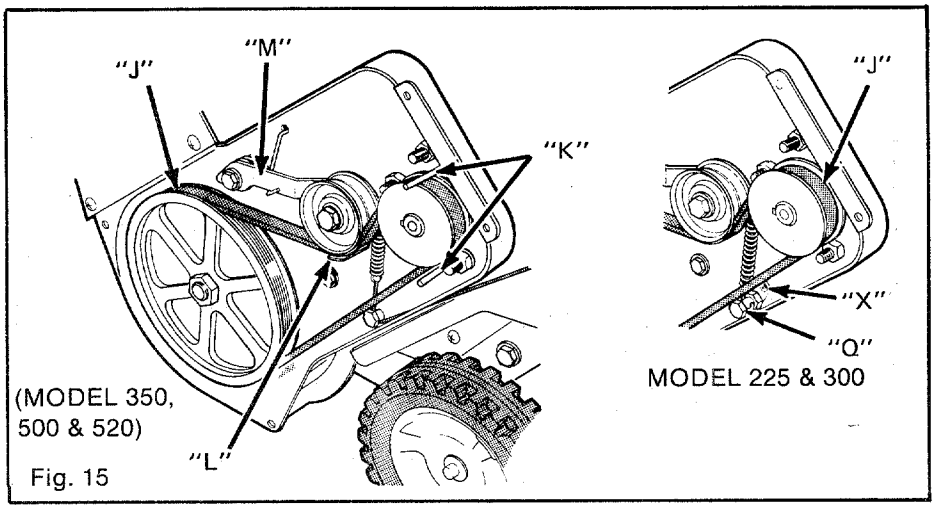


Fig. 15

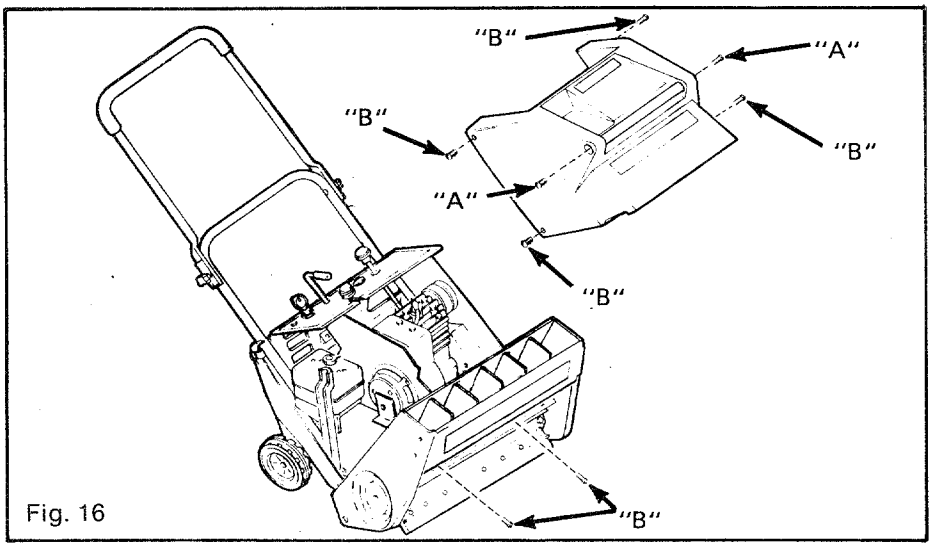


Fig. 16

AFTER EACH SEASON:

1. Check for belt wear.

2. Perform "STORAGE" instructions. (Engine and Owner Manuals)

3. Wipe oil or grease on all bare metal surfaces.

STORAGE

Remove snow and ice from unit. Perform the STORAGE instructions outlined in the Engine Manual. Touch up areas where paint has chipped off. Coat areas which do not get painted with oil or grease to prevent rust.

Refer to the "CARE AND MAINTENANCE" section and perform all greasing and oiling as required.

Store unit in a dry area. Fold down handles as shown in Figure 17 and cover unit for additional protection.

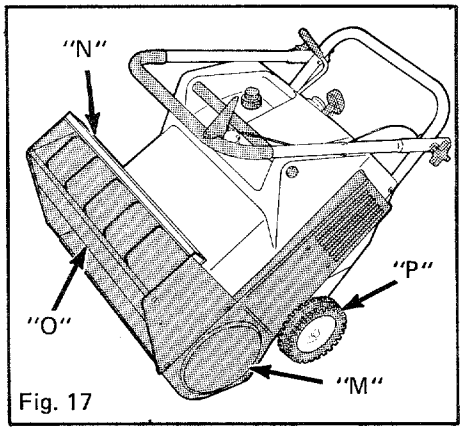


Fig. 17

LIMITED WARRANTY

All new Bolens equipment is warranted by Bolens Corporation, to the original retail purchaser only, to be free from defects in material and workmanship under normal use and service for a period of one year from date of purchase. (This period is limited to 90 days if product is purchased for commercial, institutional, industrial, rental or demonstrator use.) This 90 day limitation does not apply to Bolens QT, HT and Diesel Model tractors and their attachments manufactured at Bolens. This warranty does not apply to engines manufactured by Briggs and Stratton, Tecumseh, Kohler and Wisconsin or transmissions manufactured by Peerless. Warranties with respect to these components are provided by their respective manufacturers and copies of such warranties are delivered with each new Bolens product.

Bolens Corporation's obligation under this warranty is limited to the repair or replacement, at its option by an authorized Bolens equipment dealer, of any part found to be defective in material or workmanship without charge for parts and labor.

In order to obtain warranty service, the owner is responsible for:

1) Providing proof of purchase documentation, ownership registration or copy of bill of sale.
2) Informing any authorized Bolens equipment dealer of the defect and making the product available for repair. (Charges for pick-up, delivery and service calls are not covered by this warranty.)

This warranty does not cover defects, malfunctions or failures caused by:

1) Use of unauthorized accessories or attachments.
2) Lack of reasonable and necessary maintenance as specified in the "Operation and Safety Instructions".

DISCLAIMER OF CONSEQUENTIAL DAMAGES: BOLENS CORPORATION SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSE OF ANY KIND, INCLUDING BUT NOT LIMITED TO COST OF EQUIPMENT RENTAL, LOSS OF PROFITS OR COST OF HIRING SERVICES TO PERFORM TASKS NORMALLY PERFORMED BY THE EQUIPMENT.

LIMITATION OF IMPLIED WARRANTIES: ANY IMPLIED WARRANTIES, INCLUDED WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO A PERIOD OF ONE YEAR (90 DAYS IF PRODUCT IS PURCHASED FOR COMMERCIAL, INSTITUTIONAL, INDUSTRIAL, RENTAL OR DEMONSTRATOR USE) FROM THE DATE OF SALE.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Bolens Corporation
215 South Park Street
Port Washington, Wisconsin 53074